

SHNEYEROV, Ya.A., kand. tekhn. nauk

Conference on semi-killed and capped steel. Met. i gornorud. prom.  
(MIRA 17:8)  
no.6:77-79 N-D '62.

GURSKIY, G.V.; SHNEYEROV, Ya.A.; YAKUBOVICH, M.A.

Carry out the decisions of the All-Union Conference of Steelmakers.  
Stal' 24 no.7:577-583 J1 '64. (MIRA 18:1)

SHNEYEROV, Ya.A.; SAVCHENKOV, V.A.; PANICH, B.I.; MONAKHOVA, L.V.; SOTNIK, I.S.;  
SOKOLOVSKIY, P.I.; MULIN, N.I.

Using reinforcements of St.5ps semi-killed steel. Stal' 24 no.11:  
1025-1030 N '64. (MIRA 18:1)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallov, TSentral'nyy  
nauchno-issledovatel'skiy institut stroitel'nykh konstruktsiy i Nauchno-  
issledovatel'skiy institut betona i zhelezobetona.

SHNEYEROVA, A. G.

USSR/Medicine - Diphtheria

Medicine - Toxin - Antitoxin

Mar 1948

"Course of Diphtheria in Inoculated Children," R. I. Zettel'-Kogan, A. G. Shneyerova,  
Clinic Children's Infectious Diseases, Sverdlovsk Med Inst, Sverdlovsk Inst for  
Protection of Motherhood and Childhood, 1 p

"Sovets Medits" No 3

Among diphtheria patients hospitalized in 1944, considerable number (44.7%) had been immunized. Study of the Difference in the clinical course of diphtheria in patients that had been immunized against diphtheria and patients that had not been immunized. Among those immunized, there was not a single fatal case.

PA 51T50

SHNEYEROVA, G.V.

Use of the Ural-2 electronic digital computer as a gas  
consumption indicator. Gaz.prom. 10 no.11:33-38 '65.  
(MIRA 19:1)

SHABALIN, Georgiy Ivanovich, inzh. Primalni uchastiye: VILAND, S.M.,  
inzh.; SHNEYEROVA, L.S., inzh. CHLENOV, M.T., kand.tekhn.  
nauk, retsenzent; SERGEYEVA, A.I., inzh., red.; VOROTNIKOVA,  
L.F., tekhn.red.

[Railroad track inspection] Tekhnicheskie osmotry zheleznno-  
dorozhnogo puti. Moskva, Vses.izdatel'sko-poligr.ob"edinenie  
M-va putei soobshchenia, 1961. 139 p. (MIRA 14:12)

1. Upravleniye Oktyabr'skoy dorogi (for Viland, Shneyerova).  
(Railroads--Track)

10(4); 21(5); 24(8) PHASE I BOOK EXPLOITATION SOV/2457

Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po primeneniyu radioaktivnykh i stabil'nykh izotopov i izlucheniya v narodnom khozyaystve i nauke. 2d, Moscow, 1957

Teplotekhnika i gidrodinamika; trudy konferentsii, tom. 4 (Heat Engineering and Hydrodynamics; Transactions of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Science, Vol 4) Moscow, Gosenergoizdat, 1958. 88 p. Errata slip inserted. 2,500 copies printed.

Sponsoring Agencies: Akademiya nauk SSSR, and USSR. Glavnoye upravleniye po ispol'zovaniyu atomnoy energii.

Eds.: M. A. Styrikovich (Resp. Ed.), G. Ye. Kholodovskiy, and M. S. Fomichev; Ed. of Publ. House: L. N. Sinel'nikova; Tech. Ed.: N. I. Borunov.

PURPOSE: This collection of articles is intended for scientists and laboratory workers concerned with the use of radioactive and stable isotopes.

Card 1/5

Heat Engineering (Cont.)

SOV/2457

COVERAGE: This collection of papers deals with the application of radioactive and stable isotopes as measuring tools in various types of scientific investigation. No personalities are mentioned. References are given after some of the articles.

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5. Kudryavtsev, V.S. Determining the Specific Surface Area of Quartz and Cement Powders by the Sorption Method With the Use of "Tagged" Atoms 20
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8. Polozova, L.G., and R.P. Reyzman. Study of the Processes of Moisture Transfer in Building Materials by Means of Gammaradioscopy 38
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Heat Engineering (Cont.)

SOV/2457

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12. Rachinskiy, V.V. Use of Radioactive Isotopes in Studying the Filtration of Fluids Through Porous Media 57
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14. Borts, M.A., L.S. Zarubin, V.S. Kaminskiy, and L.L. Korsak. Investigation of the Hydrodynamics of a Fluid in the Conical Rotor of a Settling Centrifuge With the Aid of Radioactive Isotopes 67
15. Volarovich, M.P., N.V. Churayev, and B.Ya. Minkov. Investigations of the Motion of Water in Peat Under Laboratory and Field Conditions With the Use of Radioactive Isotopes 72

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Heat Engineering (Cont.)

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16. Arkhangel'skiy, M.M. Use of Radioactive Isotopes for Investigating Suspensions of River Silt 78

17. Veynik, A.I., and A.S. Shubin. Use of Radioactive Isotopes for Investigating the Mechanism of the Drying Process 85

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10-28-59

Card 5/5

SOV/96-58-6-11/24

AUTHOR: Miropol'skiy, Z.L., Cand.Tech.Sci. and Shneyerova, R.I., Engineer.

TITLE: The generalisation of experimental data on temperature conditions in the metal of horizontal and slightly sloping boiling tubes.  
(Obobshcheniye eksperimental'nykh dannykh po temperaturnym rezhimam metalla gorizonta'l'nykh i slabo naklonennykh kipyatil'nykh trub)

PERIODICAL: Teploenergetika, 1958, No.6. pp. 56-60 (USSR)

ABSTRACT: When a steam/water mixture moves in slightly sloping tubes, it separates out into layers, so that the tube is unevenly heated. The effect depends on a large number of factors and many tests had to be made in the study of it. The tests were made on two semi-full-scale rigs: a closed-circuit circulating system with an oil-fired furnace in Regional Electric Power Station No.2. of Mosenergo, and a rig of the direct-flow type using externally supplied steam and water in the Heat and Electric Power Station of the All-Union Thermotechnical Institute, where the experimental sections were radiantly heated by electric furnaces. In most tests the tubes were heated uniformly over the perimeter, but some were heated from one side only. In the tests at the All-Union Thermotechnical Institute, in addition to wall temperature measurements, the steam/water flow structure was studied by means of  $\gamma$  irradiation. The test conditions are tabulated; some of the results have already been published. The present article attempts to work out the test data

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SCV/96-58-6-11/24

The generalisation of experimental data on temperature conditions in the metal of horizontal and slightly sloping boiling tubes.

obtained in this work by means of dimensionless criteria, and a procedure is proposed for calculating the wall temperatures of horizontal and sloping boiling tubes. Separation into layers occurs over a wide range of circulation and pressure conditions. Under such conditions the temperature of the lower part of the tube, where the water is, is little above the saturation temperature; in the upper part of the tube cooling occurs by transmission of heat to the steam. An equation is given to determine the maximum temperature and the assumptions made in its derivation are described. To use this equation directly for practical calculations, one would need to know the variations in the heat-transfer coefficient to wet steam in contact with the upper part of the tube and the proportion of the tube perimeter that is free of liquid under various experimental conditions. As this information is lacking, the test data must be formulated as dimensionless criteria and the relationships between them indicated. The appropriate dimensionless formulae are then derived. Equation (2) for the temperature difference between top and bottom of the tube, is a function of 14 dimensional magnitudes, and is reduced to an equation with nine dimensionless criteria. Available test data is then used to express this formula concretely. Criteria required in the work are plotted in figs.1. and 2. Finally, an expression is

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SOV/96-58-6-11/24

The generalisation of experimental data on temperature conditions in the metal of horizontal and slightly sloping boiling tubes.

obtained by means of which the test data can be worked out. A graph of the test results for a uniformly heated horizontal tube worked out in this way is given in fig.3, with an equation defining the best line through the points. The scatter of the test points is accentuated because they relate to a variety of rigs and not all are equally accurate. The concurrence between the straight line and the results of various authors is discussed. When the tube is heated from one side only, the highest temperatures occur on the side of the tube where the heat flux is greatest. The maximum temperatures were the determining factor in working out the test data, and an equation is given that corresponds to the results given in fig.4. The case of sloping tubes is similarly treated by an equation and fig.5. The results show that the least permissible circulation rates depend on numerous factors, but at high temperatures and rates of heat flow, very high circulation speeds would be required to secure uniform temperature distribution round the tube. The possibility of drops of highly-concentrated salt solutions forming in the tubes must be considered, and the probable behaviour of various salts present in boiler water is discussed. There is 1 table, 6 figs. & 12 lit. references (Soviet)

ASSOCIATION: Power Institute Acad. Sci. USSR. (Energetickeskiy Institut AN SSSR)

Card 3/3

1. Boiler tubes--Thermal effects 2. Boiler tubes--Test methods

Академия наук СССР, Энергетический институт  
О. М. Крайновский

Теплоэнергетика, вып. 1 (Heat Power Engineering, No. 1) Moscow,  
Izd-vo AN SSSR, 1979. 183 p. Errata slip inserted. No. of copies  
printed not given.

Ed. of Publishing House: V. A. Kotov; Tech. Ed.: Yu. V. Rykova;  
Editorial Board: V. A. Buzin, Doctor of Technical Sciences,  
Professor (Rybn. Ed.); G. Ye. Kholodovskiy, Doctor of Technical  
Sciences; M. I. Yushchenko, Candidate of Technical Sciences;  
Z. L. Kipolitskiy, Candidate of Technical Sciences (Secretary);  
and S. G. Poyarkov, Candidate of Technical Sciences.

PURPOSE: This work is intended for scientists and engineers working  
in the field of steam boilers.

CONTENTS: This is a collection of 9 articles on the circulation of  
water and water-steam mixtures in boiling processes, the  
pulsation of pressure in the steam field in combustion chambers,  
the interaction of the steam field with the boiler walls, the  
nonlinear problems of mathematical physics. There is also an  
article describing the problems occurring in the steam boiler of a  
nuclear energy station. References appear at the end of  
each article.

ВВЕДЕНИЕ: Эта работа посвящена проблемам циркуляции воды и  
водяно-паровой смеси в процессах кипения, пульсации давления  
в паровом поле в котлах, взаимодействия парового поля со  
стенками котла, нелинейных проблемах математической физики.  
Содержатся также статьи, описывающие проблемы, возникающие в  
паровом котле атомной энергетической станции. Литература  
приведена в конце каждой статьи.

It was found that the distribution of volume vapor content  
and air content along the elevation of the bubbling volume  
at insignificant reduced velocities of vapor or air, and at  
low boiler water salt content, resembles that of the porous  
media under various pressures and salt concentrations of the  
plates. An increase in the salt content at atmospheric  
pressure results in a decrease of vapor content. An increase in  
the reduced velocity of steam when the water is of low salt  
content increases the volume vapor content.

Безруков, Е. И. Пульсации Давления в Потоке Газ-Жидкой  
Смеси в Печи

This article describes experiments in pressure pulsation in  
four 1/2 inch long pipes of different diameters—25.8, 47.6, 76.7  
and 99.8 mm. The flow velocity changed from 0.2 to 50 m/sec.  
The gas content changed from 0.05 to 0.95. Graphical representa-  
tion of experimental results are given.

Низкопольский, З. Л., and Е. И. Шмелев. Investigation of a  
Flow of Vapor-Water Mixture in Pipes by  $\gamma$ -Radiation

In this article the authors describe problems in deter-  
mining the average values of steam volume contents of air in  
pipes and in conduits of rectangular cross section. The  
results obtained are also valid for conduits of  
arbitrary geometrical shapes. Diagrams and graphs are given.

Брызгалов, В. А. and С. С. Пилисов. Temperature Fields in  
Combustion Chambers

Three kinds of furnace heating chambers were investigated.  
Experimental data show that under condition of approximate  
self-modeling temperature fields these chambers perform  
according to load. It is stated that the approximate  
independence of dimensionless temperature fields from the  
load occurs in various combustion chambers which differ from  
each other according to geometric characteristics and the  
type of combustion processes.

Шоколов, Д. Н. Steam Boilers of a Solar Heat Energy Station

The author presents data on the performance of steam boilers  
operating on solar heat energy. General diagrams of a  
boiler and tables of principal characteristics are given.

Суринов, Ю. А. Investigation of Radiation Heat Transfer in  
Systems of Gray Bodies

The author develops a theory of radiation and radiation heat  
transfer. The equations appearing in this article permit a  
theoretical-probability interpretation. The article is di-  
vided into two parts: 1) Solution of a mixed problem on radi-  
ation heat exchange in a system of gray bodies in a diathermic  
medium, and 2) Solution of a mixed problem of radiation heat

SHNEYEROVA, R.I., inzh.; SHVARTS, A.L., kand.tekhn.nauk; MIROPOL'SKIY,  
Z.L., kand.tekhn.nauk; LOKSHIN, V.A., kand.tekhn.nauk

Experimental study of the real steam contents and useful heads  
in tilted pipes. Teploenergetika 8 no.4:63-67 Ap '61.  
(MIRA 14:8)

1. Energeticheskiy institut AN SSSR i Vsesoyuznyy teplotekhnicheskiy  
institut.

(Boilers)



MIROPOL'SKIY, Z.L.; SHNEYEROVA, R.I.

Use of bremsstrahlung in studying the phase composition of a steam-water mixture in a heated tube. Teplofiz. vys. temp. 1 no.1:112-117  
Jl-Ag '63. (MIRA 16:10)

1. Energeticheskiy institut im. G.M.Krzhizhanovskogo.

MIROPOLSKIY, Z. L.; SHNEYEROVA, R. I.

"Measurement of volumetric vapor content in a steam-generating tube with the aid of bremsstrahlung."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12 May 1964.

Krzhizhanovskiy Power Inst.

MIROPOL'SKIY, E.L., kand. tekhn. nauk; SHITSMAN, M.Ye., kand. tekhn. nauk;  
SHNEYEROVA, R.I., inzh.

Effect of the heat stream and velocity on the hydraulic resistance  
of a steam and water mixture in pipes. Teploenergetika 12 no.5:67-  
70 My '65. (MIRA 18:5)

1. Energeticheskiy institut im. G.M.Krzhizhanovskogo.

CA  
Parameters characteristic of the flow of aviation oils at low temperatures. S. I. Pensakhina, R. N. Shumova, and G. S. Taramanyan. *Akad. Nauk S.S.S.R., Otdel. Tekh. Nauk, Izv. Mashinovedeniya, Soreshchaniye Vysokoi Zhidkosti i Kollod. Rashtorov (Conf. on Viscosity of Liquids and Colloidal Solns.)* 2, 155 (1944). The min. temp.  $t'$  of mobility of lubricating oils dispensed to the motor by a rotating-pump app., defined as the lowest temp. at which in one revolution of the pump not less than 0.08 g. of oil is yielded, was compared with the  $t$ , p. of the oil,  $t_f$ , defined by a U.S.S.R. specification by a test consisting in heating the oil in a test tube to 50° and cooling to the temp. at which the oil will not move for 5 mm. when the tube is inclined at 45°. On 12 different oils it was demonstrated that  $t_f - t'$  may vary from -10° to +8°. Two oils of nearly equal  $t_f$  (about -35°) were found to have  $t'$  differing by 15°. Two other oils with equal  $t'$  had  $t_f$  differing by 15°; in an extreme case, 2 oils freezing at -2° and -30°, resp., have practically the same  $t'$ , about -10°. Consequently, the freezing temp. is in no way a criterion for the low-temp. mobility of an oil from the point of view of its feeding to the motor. A "limiting viscosity" which can be theoretically defined as that viscosity at which an oil can still be fed through a given dispensing system cannot be practically detd.: on 10 different lubricating oils it is shown that at  $t'$  the viscosity may vary from 330 to 460 stokes; in individual cases it may even be considerably higher than that. One oil could be dispensed through the pump-feeding system at as low as -21°, even though its viscosity could be detd.

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in a capillary viscometer (with addnl. Hg-column pressure) only down to -15°. The low-temp. behavior of an oil in a feeding system cannot, therefore, be predicted from viscometric measurements of the conventional type. Examples are further quoted demonstrating the absence of a direct relation between the low-temp. feeding behavior and the viscosity index: an oil, nitrobenzene-purified, viscosity at 100° = 2.21°E.,  $t_f$  -32°, index 98; after deparaffination at -30° the index drops to 13; however at -20° the deparaffined oil shows a viscosity of 300 stokes as against 625 prior to deparaffination. An oil of 2.92°E. at 100° after deparaffination, index without addn. 95, with 1° Parafflow 99; at -10°, the oil without addn. shows 185 stokes, with Parafflow 807. In many cases presence of minute amts. of paraffin or addn. of Parafflow alter drastically the low-temp. feeding characteristics; whereas the viscosity index may vary only insignificantly. It is not necessarily true that at equal viscosity at 100°, a better viscosity index means higher viscosity at low temp.; very often, but not always, the reverse will hold. Inasmuch as the low-temp. feeding behavior of an oil cannot be predicted from either the freezing temp., the value of the viscosity, or the viscosity index, it can be detd. directly only in a dispensing setup duplicating the actual service conditions in the motor.

N. Thon

SHNEYEROVA, R. N.

USER/ Chemistry - Physical chemistry

Card 1/1 Pub. 147 - 9/21

Authors : Zaslavskiy, Yu. S.; Kreyn, S. E.; and Shneyerova, R. N.

Title : Study of the reaction of anticorrosion admixtures to oil by the radioactive indicator method

Periodical : Zhur. fiz. khim. 29/10, 1815-1821, Oct 1955

Abstract : A new method for the study of films formed on metal surfaces by anti-corrosive admixtures was introduced. It was found that the protective film forms with the participation of the basic components of the anti-corrosion admixture, namely, the sulfur or phosphorus. The dependence of the protective film formation upon time, oil temperature, admixture concentration in the oil and the surface of the metal is explained. The complex nature of the protective film formation because of the adsorption processes and the chemical reaction between admixture and metal is discussed. Two USSR references (1951 and 1954). Graphs.

Institution : .....

Submitted : January 11, 1955

SHNEEROVA, R. N.

✓ Use of labeled atoms in the study of the action of anticorrosive additives in oils. Yu. S. Zaslavskii, S. E. Krein, E. N. Shneerova, and G. I. Shor. Khim. i Tekhnol. Topliva 1950, No. 4, 37-49. --In expts. carried out by the COST-5162-49 method, films deposited on Pb, Cu, Pb, bronze, and steel III plates by lubricating oils of the type MK-22, contg. 0.5%  $\text{Pb}^{32}\text{O}_3$  (I) and 0.5% sulfonated ( $\text{S}^{35}$ ) oil were measured after 1, 5, 10, 15, 20, 25, 30, 40, 50, 60, 90, 120, 150, 180 min. and afterwards every hr. at 90, 110, 140, 170, 200, and 220° for a total of 10 hours at each temp. The wt. of the film was calcd. from the equation  $x \pm \text{mg}/n$ , where  $m$  is the measured impulse/min. for the tested plate,  $g$  the wt. (mg.) of the deposited radioactive substance on the plate,  $n$  the av. radioactivity of the control plate detd. every day. The sensitivity of the method was  $10^{-7}$ - $10^{-8}$  g. For every temp. the wt. of the film contg. I rapidly increased to a value characteristic for each metal, and then leveled off. With an increase in temp., the rate of film formation sharply increased; however, the wt. of the film decreased. Analogous results were obtained with the sulfonated oils. Analysis of the plates showed that they contained  $\text{S}^{35}$ ; the depth of penetration for each metal was directly related to the temp., reaction time, and concn. of the additive. The penetration was greatest (about 0.01 mg./sq.cm. 140  $\mu$  deep after 8 hrs. at 140° with 1%  $\text{S}^{35}$  in the oil) for Pb bronze. The kinetics of film formation were also followed by measuring the radio-activity of the oils (MT-16, MT-16p, MK-22) induced by Pb, cast iron, and steel plates contg. about 0.001%  $\text{Sb}^{124}$  after 30 hrs. at 110, 140, 170, 185, 200, and 220°. Max. corrosion for each metal and each oil occurred at about 170°. The addn. of inhibitors first decreased the corrosion but after the

Zaslavskii, Yu. S. , Krein, S. E. , Shneerova, R. N.

point corresponding to the max. gain in wt. of the protective film was reached, the intensity of the corrosion increased and the wt. of the film decreased. From these results it is concluded that the principal effect of the additives in the oils consists of the formation of a protective film on the metal surface. Two competing processes occur simultaneously: (1) film formation between the additive and the metal and the increase in the thickness of the film caused by addnl. adsorption; (2) oxidation of oil which leads to the formation of acids, phenols, etc., and their salts, which gradually destroy the protective film.

A. P. Kotloby

2/2

g/m

- SHNEYEROVA, R.N.

Radiochemical determination of the stability of solutions  
of additives in lubricating oils. Yu. S. Zaslavskii, R. N.  
Shneerova, and G. I. Shor. *Zhurnal Fiz. Khim.* 22, 417-18  
(1958).—The stability of the additive solns. was detd. by  
adding substances contg. radioactive  $\text{Ca}^{45}$ ,  $\text{S}^{35}$ ,  $\text{P}^{32}$ , and  $\text{Co}^{60}$ ,  
centrifuging the oil soln., and measuring the radioactivity of  
the filtrate. The presence of  $\text{H}_2\text{O}$  in the oil was found to  
decrease stability.  
W. M. Sternberg

All-Union Sci. Res. Inst. for processing of oil and gas  
in production of artificial liquid fuel



ZASLAVSKIY, Yu. S., SHNEYEROVA, R. N., SHOR, G. I., and KUZNETSOVA, A. I.

"Radiochemical Investigation of the Stability of Solutions of Additives in Oils."  
~~pp. 107-108~~ p. 107.

"Radiochemical Investigation of the Action of Oil Additives." p. 85.

in book Study and Use of Petroleum Products, Moscow, Gostekhnizdat, 1957, 213 pp.

This collection of articles gives the results of the sci. res. work of the AU Sci. Res. Inst. for the Processing of Petroleum and Gas for the Production of Synthetic Liquid Fuel.

ZASLAVSKIY, Yu.S.; KREYN, S.E.; SHNEYEROVA, R.N.; SHOR, G.I.

Radiochemical study of the mechanism of action of additives for  
oils. Trudy VNII NP no.6:85-106 '57. (MIRA 10:10)  
(Lubrication and lubricants) (Corrosion and anticorrosives)

ZASLAVSKIY, Yu.S.; SHNEYEROVA, R.N.; SHOR, G.I.; KUZNETSOVA, A.I.

Radiochemical analysis of the stability of additives in oil.  
Trudy VNII NP no.6:107-116 '57. (MIRA 10:10)  
(Lubrication and lubricants) (Radioactive tracers)

*2/10/58*  
ZASLAVSKIY, Yu. and SHOR, G. and SHNEYEROVA, R. iv

"Researches into The Mechanism of Protection of Friction Surfaces From Corrosive Wear."

paper to be presented at 2nd UN Intl. Conf. on the peaceful uses of Atomic Energy, Geneva, 1 - 13 Sept 58.

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[illegible]

**Sponsoring Agencies:** USSR, Glavnoye upravleniye po ispol'zovaniyu  
atmofey energii, and Akademiya nauk SSSR.

Ed. of Publishing House: P.N. Belyanin; Tech. Ed.: T.P. Polenova.

**COVERPAGE:** This collection of papers covers a very wide field of the utilization of tracer methods in industrial research and control techniques. The topic of this volume is the use of radioisotopes in the machine and instrument manufacturing industry. The individual papers discuss the applications of radiotelescope techniques in the study of metals and alloys, problems of friction and lubrication, cutting, engine performance, and defects in metals. Several papers are devoted to the use of radioisotopes in the automation of industrial processes, recording and measuring devices, quality control, flowmeters, level gauges, safety devices, radiation counters, etc. These papers represent contributions of various Soviet institutes and laboratories. They were published as Transactions of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Science, April 4-12, 1957. No personalists are mentioned. References are given at the end of most of the papers.

Nikitin, M.D. (Centralny nauchno-issledovatel'skiy diesel'nyy institut - Diesel Research Institute). Effect of the Number of Re-  
volutions and Maximum Cycle Pressure on the Wear of Upper Platen  
Ring and Cylinder Sleeve in Diesels 43

Nisnevich, A. I. (Nauchno-issledovatel'skiy traktorny institut - Tractor Research Institute). Study of the Effect of Dust on the Wear of Parts of Tractor Engines

Zaslavskiy, Yu. S., G. I. Sher, and I. A. Korotova (VNIIPo pererabotke nefi i gasa i Polucheniya i ischnavleniya shchastvenno topliva - All-Union Scientific Research Institute for the Processing of Petroleum and Gas and the Production of Synthetic Petroleum Products). Reduction of the Low-temperature Wear of Cylindrical Piston Units in

Zaslavskiy, Yu. S., Krum, R. M., Shneyrov, and G. I. Shor  
(VNIIP parobazovskii i gazovoprivodnyi iskusstvovogo  
zhdlogo topliva - All-Union Scientific Research Institute for  
the Processing of Petroleum and Gas and the Production of Synthetic  
Liquid Fuel). Study of the Mechanism of the Action of Anticorro- 64  
sion on Oil Additives

Kuznetsov, M. M., O. V. Vinogradov, E. A. Pechurovskaya, E. I. Rabin, and A. V. Ulyanova (Institut nefei AN SSSR - Petroleum Institute, Academy of Sciences, USSR). Study of the Mechanism of the Inter-  
67

Students, Ya.Ya. (Vsesoyuznyy nauchno-issledovatel'skiy uchebnyy institut - All-Union Mining Research Institute). Study of the Year of Gears in Mining Machinery 73

[illegible]

SITNEYEROVA, R.N.

FRASE . BOOK REVELATION

807/2113

International Conference on the Peaceful Uses of Atomic Energy. 2nd, Geneva, 1958

Radly sovetskikh nauykh; polucheniye i primeneniye izotopov (Reports of Soviet Scientists); Production and Application of Isotopes. Moscow, Atomizdat, 1959. 588 p. (Series: Itz' Trudy, vol. 6) 8,000 copies printed.

Eds. (title page): G.I. Baryshov, Academician, and I.I. Novikov, Corresponding Member, USSR Academy of Sciences; Ed. (inside book): Z.D. Amirembol, Tech. Ed.: Z.B. Andreyenko.

PURPOSE: This book is intended for scientists, engineers, physicists, and biologists engaged in the production and application of atomic energy to peaceful uses; for professors and graduate and postgraduate students of higher technical schools where nuclear science is taught; and for the general public interested in atomic science and technology.

CONTENTS: This is volume 6 of a 6-volume set of reports delivered by Soviet scientists at the Second International Conference on the Peaceful Uses of Atomic Energy held in Geneva from September 1 to 13, 1958. Volume 6 contains 52 reports on: 1) modern methods for the production of stable radioactive isotopes and their chemical and physical properties; 2) research results obtained with the aid of isotopes in the fields of chemistry, metallurgy, machine building, and agriculture; 3) chemistry of ionizing radiation; Volume 6 was edited by G.I. Baryshov, Academician, and I.I. Novikov, Corresponding Member, USSR Academy of Sciences; and V.V. Sedov, Candidate of Medical Sciences. See Sov/201 for titles of volumes of the set. References appear at the end of the articles.

3. Yezhov, G.M. and V.B. Dolov. Means of Developing Remote Control Methods in the Radiochemical Laboratories of the AN SSSR (Report No. 2005)
4. Melnik, M.P. A.G. Zel'dovich, A.B. Prilov, and I.B. Danilov. Commercial Production of Bacterium by the Low-Temperature Distillation Method (Report No. 2352)
5. Gerdtsell, I.D., R.I.A. Kuchinov, and V.K. Tashataya. Separation of Isotopes by Diffusion in a Steam Flow (Report No. 2006)
6. Zolotarev, V.S., A.I. Il'in, and Ya.D. Kozar. Separation of Isotopes on Electromagnetic Units in the Soviet Union (Report No. 2305)
7. Alekseyev, B.A., B.P. Bolysin, V.S. Zolotarev, B.Y. Pulin, Ye.S. Chernourov, and G.I. Shor. Separation of Isotopes of Rare-earth Elements by the Electromagnetic Method (Report No. 2217)
8. Kuznetsov, P.M., B.H. Makov, M.S. Ioffe, B.D. Breshnev, and G.M. Pradkin. Ion Source for the Separation of Stable Isotopes (Report No. 2303)
9. Melnik, M.P. and P.M. Morozov. Electric Field Effect in Ion Beams on Stable Isotope Separation by the Electromagnetic Method (Report No. 2204)
10. Bogdanov, N.D., P.L. Grushin, G.I. Yermolov, and I.D. Nikulin. Use of Radioactive Isotopes in Metallurgical Research (Report No. 2218)
11. Shumilovskiy, N.M., V.A. Yemshikovskiy, and I.M. Tshier. The Theory and Practice of Beta-type Instruments Based on Radioactive Isotopes (Report No. 2235)
12. Zolotarev, V.S., G.I. Shor, and B.H. Makov. Studying the Mechanism of Protection of Rubbing Surfaces Against Wear Due to Corrosion (Report No. 2198)
13. Baryshov, G.I. and L.M. Matyuk. The  $^{74}Li^{10}$ ,  $^{24}Mg^{15}$ , and  $^{64}Ni^{14}$  Sources of Radiation for Checking Thin-walled Products (Report No. 2235)
14. Krut, B.I., A.D. Zavyalov, and G.I. Kopyrin. Studying the Redistribution of Elements in Metal Alloys and the Mechanism of Their Separation and Radiometric Methods (Report No. 2236)
15. Grushin, P.L., A.I. Yermolovskiy, V.S. Yermolovskiy, G.D. Ryabova, G.B. Fedorov. Studying the Diffusion and Distribution of Elements in Alloys of Zirconium and Titanium Base by the Radioactive Isotope Method (Report No. 2345)

5-17 18.9300

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SOV/20-128-5-42/67

AUTHORS: Zaslavskiy, Yu. S., Shor, G. I.,  
Shneyerova, R. N.

TITLE: Mechanism of the Destruction of Protective Films Formed by  
Anticorrosive Admixtures

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 5, pp 1010 - 1011,  
(USSR)

ABSTRACT: The authors investigated this mechanism of chemical destruction  
so far unknown which limits the service life of the admixtures  
as lubricating oils in the engine. The problem in question is  
the protection of the bearing bush in combustion engines a-  
gainst corrosion caused by the oxidation products of the lu-  
bricating oil. The authors used the Pinkevich apparatus (GOST  
5162-49) and a radiometric method worked out already earlier  
(Ref 2). Film destruction was investigated on the surface of  
lead. Lead plates were put into Mt-16 oil. In the first case,  
2.8% of diphenyl sulphide labeled with  $S^{35}$  and  $C^{14}$ , and 0.066%  
of stearic acid were introduced into that oil; in the second  
case, the same amount of nonlabeled admixture and 0.05% of tri-  
decanoic acid labeled with  $C^{14}$  were introduced. Figure 1 shows

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Mechanism of the Destruction of Protective Films Formed by Anticorrosive Admixtures SOV/20-128-5-42/67

the experimental results at 140°C. It appears that there is a synchronism in the formation and destruction of the film. It may be assumed that the synchronism of the vanishing of the acid together with the radicals of the admixture from the lead surface is related to the fact that the acid formed the metal-admixture complex by solvation due to its polarity. Thereby the acid carries over the radicals - because sulphur is more strongly bound to the metal than to the radicals - and disappears with them from the surface. The synchronism of the vanishing of the film formed by the acid and the film observed from sulphur radiation seems to be related to the chemical interaction of the acid with lead sulphide (it takes place after destruction of the complex of the admixture with the metal, i.e. with formation of a lead salt soluble in oil (Refs 1,3,4)). Reaction diagrams of formation and destruction of the protective film on the lead surface are given. Vanishing of the acid and radicals of the admixture in experiments with a phosphorus-containing admixture also showed synchronism (Fig 2). In this case, however, the film caused by the acid and the radicals of the admixture disappear completely and simultaneously. The acid

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Mechanism of the Destruction of Protective Films Formed  
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seems not to react with the lead phosphide formed in the destruction of the admixture complex with metal due to solvation. This may explain why phosphorus remains on the lead surface so long after the radicals of the admixture have disappeared (Ref 4). There are 2 figures and 4 references, 2 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke  
nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva

(All-Union Scientific Research Institute for Petroleum and  
Natural Gas Refining and the Production of Synthetic Liquid  
Fuels)

PRESENTED: May 18, 1959, by V. I. Dikushin, Academician 4

SUBMITTED: May 18, 1959

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S/091/62/000/005/084/112  
B162/B101

AUTHORS: Zaslavskiy, Yu. S., Shor, G. I., Shneyerova, R. N.

TITLE: Mechanism of action of certain types of additives to oils  
(washing, anticorrosion, and antiseizing additives)

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 5, 1962, 529,  
abstract 54217 (Sb. "Prisadki k maslam i toplivam".  
M., Gostoptekhnizdat, 1961, 168-173)

TEXT: Results of previous work of the authors on the mechanism of action,  
selection and methods of evaluating the above types of additives in oils  
are discussed and generalized. 21 references. Abstracter's note: Complete  
translation.

Card 1/1

Radioactive tracer methods for...

S/081/62/000/005/096/112  
B160/B138

was used to model the dispersed phase (oil oxidation and fuel combustion products). In the radioisotope method of studying the detergent properties of oils with additives the amount of gummy deposit was measured from the absorption of  $\text{Co}^{60}$  beta radiation in it. The method of studying the detergent properties of oils with additives, based on the oxidation of a thin layer of oil on a heated strip of steel, has been improved by radiometric measurement of the deposits, using  $\text{Ca}^{45}$  as a source. The chemical activity of antiscoring additives was estimated by determining the kinetics of the transitions from radioactive steel (irradiated with neutrons via  $\text{Fe}^{59}$ ) or copper (activated by introducing tracer amounts of  $\text{Ag}^{110}$  into molten copper) to the oil, under the influence of the test additives. [Abstracter's note: Complete translation]

Card 2/2

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S/065/61/000/012/004/005  
E194/E135

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who 1583 2209

AUTHORS: Zaslavskiy, Yu.S., Shor, G.I., ~~Shneyerova, R.N.~~,  
Kuznetsova, A.I., and Lebedeva, F.B.

TITLE: Reducing the corrosivity of extreme pressure (E.P.)  
additives without impairing their effectiveness

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.12, 1961,  
39-43

TEXT: Previous work by the authors has shown that whereas  
anti-corrosion additives should have strongly bonded sulphur or  
phosphorus in the molecule, E.P. additives should easily release  
sulphur, phosphorus or chlorine to form compounds on the metallic  
surfaces at high contact temperatures. This explains the well-  
known correlation between good anti-wear properties and high  
corrosivity. A combination of anti-wear and anti-corrosion  
additive components should overcome the effect of delayed E.P.  
action in high-speed friction tests. In surfaces subject to high  
speed friction there is not always time for the E.P. additive to  
operate. For laboratory tests of two component additives the

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Reducing the corrosivity of ....

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S/065/61/000/012/004/005  
E194/E135

authors developed radiotracer methods of determining the chemical activity of E.P. additives in oils in the presence or absence of friction. The chemical activity of the E.P. additives was assessed by determining the kinetics of solution of radioactive steel in oil or of copper which was activated with Ag<sup>110</sup>. Determination of the chemical activity relative to radioactive copper and steel were made with various sulphurised and chlorinated organic compounds and mixtures of these. For example, in tests with copper foil at a temperature of 150 °C it was found that chemical activity of the sulphur-containing additive dibenzyl disulphide and that of chlorinated wax were both much less than the chemical activity of a mixture of these additives. A mixture containing base oil plus 3% dibenzyl disulphide plus 7% chlorinated wax gave the best E.P. protection in the four ball test. When 6% of barium alkyl phenolate dissolved in oxpropylated alkyl-phenol was added to the oil containing dibenzyl disulphide and chlorinated wax there was a marked diminution in corrosivity of the oil without impairment of the E.P. properties. However, the reduced corrosivity to copper lasted for only ten hours. The anti-corrosion properties of

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E194/E135

phosphorus-containing compounds were also tested on the assumption that effective protection of metallic surfaces against corrosion by atoms of chlorine and sulphur can be achieved by creating, not a molecular, but a more continuous atomic film which is less penetrable. To create such films the phosphorus-containing compounds must be soluble in the base oil and release phosphorus at considerably lower temperatures than the decomposition temperatures of the E.P. components. It was indeed found that the use of phosphorus-containing additives ensured effective reduction of corrosion of steel at an oil temperature of 200 °C in the presence of a mixture of dibenzyl disulphide and chlorinated wax. Moreover, four ball machine tests showed that the E.P. properties were not impaired. Tricresyl phosphate had no anti-corrosive effect, whilst triphenyl phosphate caused a marked reduction in corrosion. By using phosphorus-containing anti-corrosion components in blends with more chemically active E.P. additives, effective blends may be made using chemical compounds that hitherto have been rejected because of their high corrosivity. E.P. oils were tested on a friction machine in which

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the rubbing surfaces are the ends of two hollow cast iron cylinders of 16 mm external diameter, one of which was radioactive. The tests were made at a speed of 600 r.p.m. with a load of 2.5 kg/cm<sup>2</sup> for a period of one hour. Typical test results show that the base oil gave a mean wear rate of 660 impulses/min of the counter; the base oil plus 3% of additive ЛЗ-6/9 (LZ-6/9) plus 7% chlorinated wax gave a wear rate of 1920 impulses/min. The same plus 0.5% triphenyl phosphite gave a wear rate of 840 impulses/min. Thus the triphenyl phosphite reduced the corrosivity of the E.P. oil to the level of the base oil. There are 3 figures, 1 table and 17 references; 11 Soviet-bloc and 6 non-Soviet-bloc. The four most recent English language references read as follows:

- Ref. 11: J.S. Elliot, N.E. Hitchcock, E.D. Edwards.  
Hypoid Gear Lubricants and Additives. J. of the Institute of Petroleum, v.45, no.428, 219-235, 1959.
- Ref. 12: F.T. Barcroft. A Technique for Investigating Reactions between E.P. Additives and Metal Surfaces at High Temperatures. Wear, v.3, no.6, 413-500, 1960.

Card 4/5

X

Reducing the corrosivity of ....

32530  
S/065/61/000/012/004/005  
E194/E135

- Ref. 14: R.B. Campbell, L. Grunberg. Study of reactions of metals with sulphur and phosphorus compounds by pulsed temperatures. Paper no. RLCC/32 at the International Conference on the use of isotopes in Physics and Industry (Copenhagen, September 6-17, 1960). Izd. MAGATE, Vena, 1961.
- Ref. 15: G. Hugel. Chemical nature of extreme pressure lubrication. Lubrication Engineering, v.14, no.12, 523-526, 1958.

ASSOCIATION: VNII NP

Card 5/5

X



ZASLAVSKIY, Yu.S.; SHOR, G.I.; SHNEYEROVA, R.N.; LEBEDEVA, F.B.

Reducing chemical wear in using lubricating oils with antiseizing  
additives. Tren.i izn.mash. no.15:486-494 '62. (MIRA 15:4)  
(Lubrication and lubricants--Testing)

ZASLAVSKIY, Yu. S.; SHOR, G. I.; MOROZOVA, I. A.; LEBEDEVA, F. B.; YEVSTIGNEYEV, Ye. V.;  
SHNEYEROVA, R. N.

"New methods of investigation of lubricant properties."

report submitted for Intl Lubrication Conf, Washington, D.C., 13-16 Oct 64.

ZASLAVSKIJ, J. [Zaslavskiy, I.S.]; SOR, G.I. [Shor, G.I.];  
SNEJEROVA, R.N. [Shneyerova, R.N.]

Radio indicator research on the mechanism of action of anticorrosion and antiseizing additives to lubricating oils. Ropa a uhlie 6 no.5:130-135 My '64.

1. All-Union Scientific Research Institute for the Processing of Petroleum and Gas and for the Production of Synthetic Liquid Fuel.

YELENEVSKIY, D.S.; SHNEYERSO, L.M.

Strength of steel parts subjected to chemical heat treatment  
in case of asymmetric cycles of loading. Trudy Sem.po kach.-  
poverkh. no.5:156-162 '61. (MIRA 15:10)  
(Case hardening)

SHNEYERSON, A.A.; PARFENOVA, M.S.; FILONOVSKAYA, M.G.

Typical structure of dysentery cultures of the Flexner group.  
Zhur.mikrobiol.epid.i immun. no.3:89 Mr '54. (MLBA 7:4)

1. Iz Odesskogo instituta epidemiologii i mikrobiologii im. Mechnikova.  
(Shigella paradysenteriae)

SHNEYERSON, A.A.

Data on regional dysentery microbiology. Part 3: Dysentery  
caused by *Shigella sonnei*. Zhur. mikrobiol. epid. i immun.  
no.6:68 Je '54. (MLBA 7:7)

1. Iz Odesskogo instituta vaktsin i syvorotok im. Mechnikova.  
(SHIGELLA SONNEI) (DYSENTERY)

SHNEYARSON, A.G., kand. biol. nauk.

In the struggle for higher livestock productivity. Veterinariia  
34 no.2:10-13 F '57. (MLRA 10:11)

1. Starshiy nauchnyy sotrudnik Krasnoyarskoy nauchno-issledovatel'-  
skoy veterinarno-opytnoy stantsii.  
(Veterinary medicine)

~~BANNOV, A.T.; SHNEVERSON, A.G.~~

How scab was eliminated from sheep in Krasnoyarsk Territory.  
Veterinariia 34 no.9:43-46 S '57. (MLRA 1C:9)

1. Nachal'nik vetotdela Krasnoyarskogo krayse'l'khozupravleniya (for Bannov).
2. Starshiy nauchnyy sotrudnik Krasnoyarskoy nauchno-issledovatel'skoy veterinarynoy stantsii.  
(Krasnoyarsk Territory--Scab disease in sheep)



SHNEYERSON, A.G., kand.biologicheskikh nauk

Krasnoyarsk Veterinary Research Station. Trudy VIEV 23:378-379 '59.  
(MIRA 13:10)

(Krasnoyarsk Territory--Veterinary research)

SHNEIDERSON, A. G.

*Chukotka*

"Prevention of agricultural animals from blood -- sucking insects  
in taiga."

Veterinariya Vol. 37, No. 3, 1960, p. 62

*Krasnoyarsk NIVOS*

SHENKOV, A. I.

The acuteness of the general crisis of capitalism in its modern phase; lecture. Moskva  
Pravda 1949. 23 p. (52-17971)

HC59.349

SHNEYERSON, Avraam Il'ich; KOSTIN, V.; red.; DANILINA, A., tekhn.red.

[Poverty in the midst of abundance] Nishcheta sredi izobil'ia.  
Moskva, Gos.izd-vo polit.lit-ry, 1959. 69 p. (MIRA 12:5)  
(United States--Economic conditions)

L 58810-65 EWT(m)/EPF(c)/EPR/EWP(t)/EWP(b) Pr-4/Ps-4 IJP(c) JD

ACCESSION NR: AP5015691

UR/0076/65/039/006/1403/1407  
542.48 + 541.123.3

29  
26  
B

AUTHOR: Shneyerson, A.L.; Miniovich, M.A.; Filippova, Zh. M.; Soroko, S.N.; Platonov, P.A.

TITLE: Liquid-vapor equilibrium in the systems nitric acid-water-magnesium nitrate, nitric acid-water-calcium nitrate, and nitric acid-water-magnesium nitrate-calcium nitrate

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 6, 1965, 1403-1407

TOPIC TAGS: magnesium nitrate, calcium nitrate, nitric acid, phase equilibrium, azeotropic mixture

ABSTRACT: The presence of magnesium nitrate, calcium nitrate or their mixtures in the  $\text{HNO}_3\text{-H}_2\text{O}$  system sharply increases the  $\text{HNO}_3$  content in the vapor phase and displaces its azeotropic point, the effect of magnesium nitrate being more pronounced. For example, the equilibrium concentration of  $\text{HNO}_3$  in the vapor phase over pure 20%  $\text{HNO}_3$  is about 1.5%. However, when 60%  $\text{Ca}(\text{NO}_3)_2$  or  $\text{Mg}(\text{NO}_3)_2$  is present, the  $\text{HNO}_3$  concentration in the vapor phase increases to 53.5 and 82.3%, respectively. The

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ACCESSION NR: AP5015691

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effect of the nitrates on the azeotropic point of nitric acid is approximately additive. Hence, in order to obtain the equilibrium vapor compositions for the system  $\text{HNO}_3\text{-H}_2\text{O-Ca(NO}_3)_2\text{-Mg(NO}_3)_2$ , it is sufficient to have data for the ternary systems  $\text{HNO}_3\text{-H}_2\text{O-Ca(NO}_3)_2$  and  $\text{HNO}_3\text{-H}_2\text{O-Mg(NO}_3)_2$  (see Figs. 1 and 2 of the Enclosure), as for example when calculations are made for the rectification of nitric acid in the presence of mixed impurities consisting of magnesium and calcium nitrate. "O.A. Manayenkova and K.V. Artoshchenko participated in the experimental work." Orig. art. has: 4 figures and 2 tables.

ASSOCIATION: Gosudarstvennyy institut azotnoy promyshlennosti (State Institute of the Nitrogen Industry)

SUBMITTED: 13Feb64

ENCL: 02

SUB CODE: IC

NO REF SOV: 003

OTHER: 004

Card 2/4

Oxidation of ethyl alcohol to acetaldehyde. M. YA. KADAN AND A. L. SHNEK-SHIN. *J. Applied Chem.* (U. S. S. R.) 5, 380-90 (1932).—Oxidation of EtOH to AcH with air in presence of catalysts (Cu and Ag) was studied. The yield of AcH is about 87.8-95.8% with Cu and 94.3-97.2 with Ag, depending on the method of calcn. (from direct analysis or gas analysis). V. KALICHVANSKY

Y. KALICHMANOV

ASME-STEEL METALLURGICAL LITERATURE CLASSIFICATION

BC

2-1

Decomposition of  $SO_2$  through electron impacts. N. NIKHRAPOV and A. SOMMERSON (Acta Physicochim. U.R.S.S., 1955, 2, 711-732).—The crit. reaction potentials  $12.7 \pm 0.5$ ,  $15.7 \pm 0.5$ , and  $24.5 \pm 0.5$  volts, corresponding with the changes  $SO_2 \rightarrow SO_2^+$ ,  $SO_2 \rightarrow SO^+ + O$  and double the potential of formation of  $SO_2^+$ , and the dependence of reaction velocity and electron yield on  $SO_2$  pressure and anode current, have been measured using a triode as a reaction chamber without freezing out the reaction products. The velocity of reaction is independent of temp. The conclusions of previous workers regarding reactions in electrical discharges are criticised as leaving out of account energetic relationships and ion recombination.

T. G. P.

ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION

FROM SYNDICATE										FROM BOMBAY									
1ST AND 2ND ORDERS										1ST AND 2ND ORDERS									
1ST AND 2ND ORDERS										1ST AND 2ND ORDERS									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20



SHNEVERSON, A. L.

600

1. SHNEVERSON, A. L.; VASIL'YEV, S. S.
2. USSR (600)

"The Kinetics of the Dissociation of Nitrogen Oxide in an Electrical Discharge,"  
Zhur. Fiz. Khim, 13, No. 9, 1939. Laboratory of Inorganic Catalysis, Moscow State  
University, Institute of Chemistry. Received 25 February 1939.

Report U-1015, 3 Jan 1950

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSES AND PROPERTIES INDEX																			
BC										R II 1									
<p>Chemical induction in steam cracking of methane. N. I. Kobosov and A. I. Scheneman (<i>Chem. Acad. Sci. U.R.S.S.</i>, 1941, 88, 317-322). The cracking of <math>\text{CH}_4</math>-<math>\text{C}_2\text{H}_6</math> mixtures on heating has been investigated over two temp. ranges (800-1100°, 1300-1750°) in C or porous metal. Cracking of <math>\text{CH}_4</math> is greatly increased by the presence of <math>\text{C}_2\text{H}_6</math>. Up to ~1300°, the chief product is <math>\text{C}_2\text{H}_4</math>; above this it is <math>\text{C}_2\text{H}_2</math>. The extent of decarb. of <math>\text{C}_2\text{H}_6</math> is ~100 times as great as that of <math>\text{CH}_4</math>. It is concluded that there must be some inductive effect between the cracking of <math>\text{C}_2\text{H}_6</math> and that of <math>\text{CH}_4</math>. The primary process, <math>\text{C}_2\text{H}_6 \rightarrow \text{C}_2\text{H}_4 + \text{H}_2</math>, and the secondary <math>2\text{CH}_4 \rightarrow \text{C}_2\text{H}_2 + 2\text{H}_2</math>. A. J. M.</p>																			
A 58-51 A METALLURGICAL LITERATURE CLASSIFICATION																			
REGIONAL INDEX										REGIONAL INDEX									
GROUPS										GROUPS									
SUBGROUPS										SUBGROUPS									
SUBSUBGROUPS										SUBSUBGROUPS									

1ST AND 2ND DEDEES		PROCESSING AND PREFERENCE		3RD AND 4TH CROSS	
<p><b>CA</b></p> <p><b>Absorption of carbon dioxide by ethanolamines. I.</b>            Rate of absorption of carbon dioxide in solutions of mono-, di-, and triethanolamine. A. L. Shencerson and A. G. Lebus. <i>J. Applied Chem. (U.S.S.R.)</i> 19, 889-90 (1946) (in Russian).—At equil., at 50°, the concn. <math>y</math> of <math>\text{CO}_2</math> in moles per mole ethanolamine, is related to its partial pressure <math>p</math> (from 10 to 760 mm. Hg) by <math>y = ap^r</math>; from exptl. data of Mason and Dodge (<i>Trans. Am. Inst. Chem. Eng.</i> 32, 27(1936)) and from the authors' data, <math>a</math> and <math>r</math> have the values: for (I) <math>\text{HOCH}_2\text{CH}_2\text{NH}_2</math>, 2 mols., 0.398, 0.083; 5 mols., 0.398, 0.056; (II) <math>(\text{HOCH}_2\text{CH}_2)_2\text{NH}</math>, 2 mols., 0.190, 0.197; 5 mols., 0.170, 0.187; (III) <math>(\text{HOCH}_2\text{CH}_2)_3\text{N}</math>, 0.5 mol. 0.0316, 0.46; 2 mols., 0.0098, 0.66; 3.5 mols., 0.0062, 0.66. The rate, expressed by the coeff. of absorption <math>K = (\Delta x)/(\Delta p)</math> (where <math>\Delta x</math> = change of the vol. fraction of <math>\text{CO}_2</math> in the gas as a result of absorption, <math>V</math> = vol. (cu. m.) of gas passed in 1 hr., <math>\Delta p</math> = mean logarithmic value of the pressure difference between gas and liquid, <math>r</math> = free vol. of the scrubber nozzle), given in cu. m. (<math>\text{CO}_2</math>)/hr. <math>\times</math> cu. m. <math>\times</math> atm., and calcd. from the compn. of the gas (in agreement within 10% with that calcd. from the liquid), was found in all cases to decrease with the mean degree <math>\alpha</math> (in %) of the conversion into ethanolamine carbonates that takes place in the absorption, e.g., <math>2 \text{HOCH}_2\text{CH}_2\text{NH}_2 + \text{H}_2\text{O} + \text{CO}_2 = (\text{HOCH}_2\text{CH}_2\text{NH}_2)_2\text{H}_2\text{CO}_3</math> and <math>(\text{HOCH}_2\text{CH}_2\text{NH}_2)_2\text{H}_2\text{CO}_3 + \text{H}_2\text{O} + \text{CO}_2 = 2(\text{HOCH}_2\text{CH}_2\text{NH}_2)\text{HCO}_3</math>. Plots of <math>K</math> against <math>\alpha</math> give straight lines permitting extrapolation to <math>\alpha = 0</math>; examples, temp. 50°, <math>V</math> (mean) = 3.4 cu. m./sq. m. <math>\times</math> hr., <math>\text{CO}_2</math> (mean) in gas (<math>N_2</math>) 3-5%, <math>\alpha = 0, 15, 30, 50, 80\%</math>, 12 mols., <math>K = 2920, 2300, 2070, 1500, 600</math>; 5 mols., <math>K = 4300, 3740, 3140, 2340, 1140</math>; II 2 mols., <math>K = 1200, 1020, 840, 600, 240</math>. Roughly, for I and II, increase of <math>\alpha</math> by 50% results in a 50% decrease of <math>K</math>, whereas for III this is reached for a 20% increase of <math>\alpha</math>. With increasing <math>\text{CO}_2</math> content in the gas (from 3 to 50 vol. %), <math>K</math> decreases; with <math>\text{CO}_2</math> (mean) 30%, <math>K</math> falls by 2-3% when <math>\text{CO}_2</math> is increased by 1%; examples, 60°, 3.4 cu. m./sq. m. <math>\times</math> hr., <math>\alpha = 0, \text{CO}_2</math> 3, 30, 50%, 15 mols., <math>K = 4300, 1840, 1040</math>; II 5 mols., <math>K = 1380, 760, 620</math>. The rate of flow of the gas, between 100 and 600 cu. m./sq. m. <math>\times</math> hr. for I and II, and between 20 and 70 for III, is practically without effect on <math>K</math> (calcd. for <math>\alpha = 0, \text{CO}_2</math> mean 3 and 31%). Solns. of I and II decreased the <math>\text{CO}_2</math> content of the gas, from 5 and 34% to about 0.006%, in about <math>1/2</math> min. of contact; III required 3 min. to decrease <math>\text{CO}_2</math> from 5 to 0.02%. With increasing rate of flow of the absorbing liquid, <math>K</math> increases, by about 35 and 20% on doubling the rate of flow from 2 and 4 cu. m./sq. m. <math>\times</math> hr., resp., for <math>\text{CO}_2</math> 3 and 31%. At const. <math>V</math>, <math>\alpha (= 0</math> and 60%) and <math>\text{CO}_2</math> content (5 and 35%), and increasing concns. of ethanolamine, <math>K</math> first increases, passes through a max., and then falls; the max. is located, for I, II, III, at 5.5, 3, 2 mole/l., resp.; the fall at high concns. is ascribed to increased viscosity. In terms of temp., <math>K</math> rises rapidly to about 50° and then either remains fairly const. or falls after passing through a max. For the purification of 1000 cu. m. of gas contg. 5% <math>\text{CO}_2</math>, with a 5 <math>M</math> soln. of I, at <math>\alpha = 74\%</math>, the necessary scrubber vols. are, at 25, 50, and 75°, 1.0, 0.6, and 1.8 cu. m., resp. Under identical conditions, <math>K</math> is 2-2.5 times greater for I than for II, and 20-30 times greater than for III.</p>					
<p>ASS. S.L.A. METALLURGICAL LITERATURE CLASSIFICATION</p>					
<p>FROM 1711/1711V</p>					
<p>103080 HIF ONY GBE</p>					
<p>0011171 ONE ONY 151</p>					

SHNEYERSON, A. L.

62/49T17

USSR/Chemistry - Carbon Dioxide      Jun 49  
Chemistry - Ethanol

"Absorption of Carbon Dioxide by Ethanolamines:  
II, Absorption of Carbon Dioxide by Solutions  
Containing a Mixture of Mono-, Di-, and  
Triethanolamines," A. L. Shneyerson, A. G.  
Leybush, State Inst of Nitrogen Ind, 5 pp

"Zhur Prikl Khim" Vol XXII, No 6

Solubility and rate of absorption of CO<sub>2</sub> in  
aqueous solutions containing a mixture of  
ethanolamines can be calculated simply by add-  
ing the values for solubility and rate of

62/49T17

USSR/Chemistry - Carbon Dioxide (Contd)      Jun 49  
absorption of CO<sub>2</sub> in each of the various com-  
ponents. Submitted 17 Jun 48.

62/49T17

CA

2

Absorption of hydrogen sulfide and of its mixtures with carbon dioxide by ethanolamines. A. G. Leibush and A. L. Shneerson. *J. Applied Chem. U.S.S.R.* 23, 149-57(1950) (Engl. translation); *Zhur. Priklad. Khim.* 23, 145-52.— The soly. of  $H_2S$  in ethanolamine solns. rises sharply as its partial pressure is increased and diminishes with temp. rise from 15 to 50°. The soly. in monoethanolamine solns. is 2.5 to 3.5 times as high as in diethanolamine solns.  $CO_2$  lowers the soly. of  $H_2S$  in ethanolamine solns. and  $H_2S$  likewise lowers the soly. of  $CO_2$  in ethanolamine solns. Results are compared with Riegger's data (*C.A.* 39, 856<sup>4</sup>).  
M. McMahon

175

**2967\* Rate of Absorption.** (In Russian.) A. G. Leibush and A. I. Shureysyn. *Zhurnal Prikladnoi Khimii* (Journal of Applied Chemistry), v. 23, Nov. 1950, p. 1176-1186.

Absorption of  $\text{H}_2\text{S}$  and of a mixture of  $\text{H}_2\text{S}$  and  $\text{CO}_2$  by mixtures of mono- and diethanolamine were investigated. Influence of different factors, such as degree of transformation of ethanolamines into sulfides or carbonates, velocity of gas flow, velocity of liquid flow, concentration of ethanolamine, and concentration of  $\text{CO}_2$  and  $\text{H}_2\text{S}$  in the gas mixture was determined.

ASD.3LA METALLURGICAL LITERATURE CLASSIFICATION

SHNEERSON, A.L.; YEREMIN, Ye.N.

Nature of the yellow-green emission in the oxidation of nitrogen in  
the electric discharge. Zhur.Fiz.Khim. 26, 1493-1503 '52.(MLRA 5:12)  
(GA 47 no.13:6250 '53)

SHNEYERSON, A. L.

*chem* Caking characteristics of ammonium nitrate. A. L. Shneyerson, V. A. Kleyke, and M. A. Minovich. Zhur. Prikl. Khim. 29, 882-8 (1956). The effect of cooling, moisture content,  $KNO_3$ , and compression (up to 0.2 kg./sq. cm.) on the caking characteristics of  $NH_4NO_3$  was detd. Samples (12 g.) were heated up to 75°, compressed in a thermostat, and transferred (sample and press) into a const.-humidity box where it was allowed to cool. The caking const.  $K$  was detd. by the percentage of the sample passing through a revolving screen in 5 sec. Compression under 0.12 kg./sq. cm. of samples contg. 1.00-1.72%  $H_2O$  and cooling to 36° did not affect the value of  $K$ . Samples contg. 5%  $KNO_3$  and 1.4%  $H_2O$  cooled to 18° did not cake. But samples contg. 2 and 2.5%  $KNO_3$  began to cake when cooled to 20 and 18°, resp. Thermograms of these 2 mixts. showed the transition III → IV to be at 22.5 and 20.6°, resp. The values of  $K$  increased with the pressure of compression and with the moisture content. Increasing the latter from 0.45 to 0.9% increased  $K$  5 fold; further increase to 1.8% had no effect. It was concluded that caking occurred at the transition III → IV at 32.27° (cf. Alekseenko and Boldyrev, preceding abstr.).

*PM* *SA*  
T. Bencowitz



SHNEYERSON, A L

7 4  
Caking characteristics of ammonium nitrate. A. L.  
Shneyerson, V. A. Klevke, and M. A. Mintovich. J. Appl. Chem. U.S.S.R. 29, 743-7(1956)(English translation).  
See C.A. 50, 16011f. B. M. E.

MINIOVICH, M.A.; SHMEYERSON, A.L.; KLEVKE, V.A.

New refrigerant for the condensation of nitrogen oxides from nitrosyl  
gases. Zhur.prikl.khim. 31 no.11:1739-1741 N '58.

(MIRA 12:2)

(Nitrogen oxides)

(Refrigerants)

L 10197-66 EWT(m)/EWP(t)/EWP(b) LJP(c) JD

ACC NR: AP5028456.

SOURCE CODE: UR/0286/65/000/020/0019/0019

AUTHORS: <sup>55</sup>Miniovich, M. A.; <sup>55</sup>Shneyerson, A. L.; <sup>55</sup>Filippova, Zh. M.; <sup>55</sup>Atroshchenko, V. I.; <sup>55</sup>Zasorin, A. P.; <sup>55</sup>Ivanovskiy, F. P.

ORG: none

TITLE: Method for obtaining nitric acid. <sup>21.5</sup>Class 12, No. 175492 [announced by <sup>55</sup>State Scientific Research and Design Institute for the Nitrogen Industry and Products of Organic Synthesis (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 19

TOPIC TAGS: nitric acid, nitrogen oxide, nitrogen compound

ABSTRACT: This Author Certificate presents a method for obtaining nitric acid at a pressure of 4—9 atm by absorbing gaseous nitrogen oxides in water in an absorption tray-type column. To obtain 68—80% nitric acid, liquid oxides of nitrogen are introduced into the column at a point below the formation of 50—63% nitric acid. The reaction may also be carried out by introducing air into the column at a point below which the liquid oxides of nitrogen are introduced.

SUB CODE: 11/ SUBM DATE: 18Oct63/

Card 1/1

UDC: 661.56

A. TEBSON, A.L.; FILASHOVA, Zh.M.; MINIOVICH, M.A.

Density and viscosity of concentrated solutions of potassium  
nitrate within 100°-150° temperature range. Zhur.prikl.kim.  
38 no.9:2110-2112 S '65.

(MIR: 18:17)

SHNEYERSON, A.L.; MINIOVICH, M.A.; FILIPPOVA, Zh.M.; SOROKO, S.N.;  
PLATONOV, P.A.

Liquid-vapor equilibrium in the systems  $\text{HNO}_3 - \text{H}_2\text{O} - \text{Mg}(\text{NO}_3)_2$ ,  
 $\text{HNO}_3 - \text{H}_2\text{O} - \text{Ca}(\text{NO}_3)_2$ , and  $\text{HNO}_3 - \text{H}_2\text{O} - \text{Mg}(\text{NO}_3)_2 - \text{Ca}(\text{NO}_3)_2$ .  
Zhur. fiz. khim. 39 no.6:1403-1407 Je '65.

(MIRA 18:11)

1. Gosudarstvennyy institut azotnoy promyshlennosti. Submitted  
Feb. 13, 1964.

SHAFYERSON, A. W.

"Antitoxins Against Perfringens and Oedematiens Infections as  
Antigens for Comprehensive Experimental Immunization and Revaccination."  
Cand Med Sci, Central Inst for the Advanced Training of Physicians, Min  
Health USSR, Moscow, 1955. (KL, No 9, Feb 55)

SO: Sum. No. 631, 26 Aug. 55 - Survey of Scientific and Technical Diss-  
ertation Defended at USSR Higher Educational Institutions.  
(14)

ROMANOV, G.V.; SHNEYERSON, A.N.

Phosphate-peptone agar in determining the virulence of *Corynebacterium diphtheriae*. Zhur.mikrobiol.epid. i immun. 27 no.12:34-39 D '56.

(MLRA 10:1)

1. Iz Gosudarstvennogo kontrol'nogo instituta syvorotok i vaktsin imeni Tarasevicha.

(*CORYNEBACTERIUM DIPHTHERIAE*,

virulence, determ. with phosphate-peptone agar (Rus))

(AGAR,

phosphate-peptone agar in determ. of *Corynebacterium diphtheriae* virulence (Rus))

COUNTRY	:	USSR	F
CATEGORY	:		
ACC. JOUR.	:	Antibiot., No. 3 1957, No. 10219	
AUTHOR	:	Shneyerson, A. N.	
INSTR.	:	115	
TITLE	:	Comprehensive Immunization Against Gas Gangrene and Tetanus Experimentally	
ORIG. PUB.	:	Vsb.: Anaerobnyye infektsii. Kiev, Gosmedizdat UkrSSR, 1957, 61-67	
ABSTRACT	:	Rabbits were immunized intramuscularly with native or purified and concentrated perfringens and oedematiens toxoids in combination with native tetanus toxoids with the addition of aluminum phosphate and cocaine in the capacity of depository substances. A revaccination was given 2 1/2-4 months after the first immunization without the addition of the repository substances in part of the experiments. The efficacy was shown of comprehensive immunization with respect to all	
Card:	:	1/4	



COUNTRY :	
CATEGORY :	
APPL. NO. :	10219
ABSTRACT :	
TITLE :	
ABSTRACT :	<p>immunization with repetition of it according to the indications. The rise in the titers of antitoxins after revaccination begins with the third day, reaches a maximum on the 6th to 10th day, and then gradually decreases, reaching its initial level after 4 months. At the time of maximum concentration of the toxoid the average titers of perfringens antitoxin amounted to 4.2-5.6 antitoxic units per cubic centimeter; of oedematiens antitoxin 30-52 antitoxic units per cubic</p>
Card:	3/4

USSR / Microbiology. Anaerobic Bacilli.

F-6

Abs Jour: Ref Zhur-Biol., No 16, 1958, 72218.

Author : Shneyerson, A. N.

Inst : Not given.

Title : Comparative Study of the Immune Properties of the  
Anatoxins of B. oedematiens.

Orig Pub: Zh. mikrobiol., epidemiol. i immunobiologii,  
1957, No 4, 146-148.

Abstract: Comparative study of the immune properties of  
native and purified anatoxins of B. oedematiens  
(with single intramuscular immunization of guinea  
pigs) showed that the highest activity is  
possessed by the purified, deposited (phosphorus  
acid of aluminum) anatoxins). Purified anatoxins  
without deposit are ineffective: guinea pigs  
perished from even 1 Dcl of toxin. Survival of

Card 1/2

SHNEYERSON A. N.

USSR / Microbiology. Antibiosis and Symbiosis.  
Antibiotics.

F-2

Abs Jour: Ref Zhur-Biol., 1958, No 17, 76702.

Author : Kivman, G. Ya.; Shneerson, A. N.

Inst : Not given.

Title : Synergism and Antagonism of Antibiotics. (Review  
on Materials of Foreign Periodical Literature).

Orig Pub: Antibiotiki, Sb. perev., obz. i ref. in. period.  
lit., 1957, No 6, 3-16.

Abstract: No abstract.

Card 1/1

SHNEYERSON, A.N.

Studying the toxinogenic properties of freshly isolated  
Corynebacterium diphtheriae by precipitating toxin on phosphate-peptone  
agar. Zhur.mikrobiol.enid. i immun.28 no.12:43-48 D '57.  
(MIRA 11:4)

1. Iz Gosudarstvennogo kontrol'nogo instituta imeni Tarasevicha.  
(CORYNEBACTERIUM DIPHTHERIAE,  
toxin, precipitation in phosphate-peptone agar from freshly  
isolated strains (Rus)

SHNEYERSON, A.N.

Effect of antibiotics on toxin formation by *Corynebacterium diphtheriae*.  
Antibiotiki 3 no.2:102-106 Mr-Apr '58. (MIRA 12:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov,  
(ANTIBIOTICS, effects,  
on *Corynebacterium diphtheriae* toxin synthesis (Rus))  
(*CORYNEBACTERIUM DIPHTHERIAE*, effect of drugs on,  
antibiotics, on toxin synthesis (Rus))

BUYANOVSKAYA, I.S., SHNEYERSON, A.N., ANDREYEVA, N.A.

Utilization of sensitive and resistant strains of microbes in the  
selection of new antibiotics [with summary in English]. Antibiotiki,  
3 no.3:8:12 My-Je '58 (MIRA 11:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.  
(ANTIBIOTICS,  
selection of new prep. on resist. & sensitive bact.  
(Rus))

BUYANOVSKAYA, I.S.; SHNEP'ERSON, A.N.; ANDREYEVA, N.A.

Characteristics of the properties of variants of *Staphylococcus aureus* 209 P resistant to various antibiotics. Antibiotiki 4  
no.4:99-104 J1-Ag '59. (MIRA 12:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.  
(STAPHYLOCOCCUS pharmacol)  
(ANTIBIOTICS pharmacol)

SHNEYERSON, A.N.

Influence of brief and prolonged contact of *Corynebacterium diphtheriae* with antibiotics on certain aspects of its virulence. Antibiotiki 5 no.1:91-96 Ja-F '60. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.  
(CORYNEBACTERIUM DIPHTHERIAE) (ANTIBIOTICS)



SOLOV'YEVA, N.K.; DELOVA, I.D.; GERMANOVA, K.I.; SAVEL'YEVA, A.M.; KHOKHLOV, A.S.; MAMIOFE, S.M.; SINITSYNA, Z.T.; PETROVA, M.A.; KOROLEVA, V.A.; NAVASHIN, S.M.; FOMINA, I.P.; BUYANOVSKAYA, I.S.; VASILENKO, O.S.; YEFREMOVA, S.A.; BEREZINA, Ye.K.; VEYS, R.A.; DMITRIYEVA, V.S.; SEMENOV, S.M.; SHNEYERSON, A.N.

Polymycin, a new antibiotic from the streptotricin group. Antibiotiki  
5, no. 6: 5-10 N-D 160. (MIRA 14:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov,  
kafedra mikrobiologii Tsentral'nogo instituta usovershenstvovaniya  
vrachey.

(ANTIBIOTICS)

SHNEYERSON, A.N.

Effect of antibiotics of the erythromycin group on the toxigenic properties of diphtheria bacilli. Antitiotiki 5 no.6:65-69 N-D '60. (MIRA 14:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov. (CORYNEBACTERIUM DIPHTHERIAE) (ERYTHROMYCIN)

GUBERNIYEV, M.A.; BUYANOVSKAYA, I.S.; TORBOCHKINA, L.I.; SHNEYERSON, A.N.

Phosphate-carbohydrate metabolism in antibiotic sensitive and  
resistant strains of Staphylococcus aureus 209-P. Vop.med.khim.  
6 no.5:490-496 S-0 '60. (MIRA 14:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov  
Ministerstva zdor'ya i pokhraneniya S.S.S.R., Moskva.  
(STAPHYLOCOCCUS) (PHOSPHORUS METABOLISM)

GUBERNIYEV, M.A.; UGOLEVA, N.A.; BUYANOVSKAYA, I.S.; SHNEYERSON, A.N.;  
KOSHTOYANTS, N.D.; ANDREYEVA, N.A.

Studying the nucleic acid and nucleoproteins content of Staphylococcus aureus 209-P, sensitive and resistant to different antibiotics.  
Biokhimiia 25 no.5:884-890 S-O '60. (MIRA 14:1)

1. The Union Research Institute of Antibiotics, Moscow.  
(STAPHYLOCOCCUS AUREUS) (NUCLEIC ACIDS)  
, (ANTIBIOTICS)

BUYANOVSKAYA, I.S.; SHNEYERSON, A.N.; ANDREYEVA, N.A.

Differentiation of antibiotics from the streptotricin, neomycin,  
and streptomycin groups with the aid of resistant microbes.  
Antibiotiki 6 no.3:255-258 Mr '61. (MIRA 14:5)

1. Laboratoriya mikrobiologicheskikh metodov kontrolya (zav.  
A.Ye. Tebyakina) Vsesoyuznogo nauchno-issledovatel'skogo instituta  
antibiotikov.

(ANTIBIOTICS)

KIVMAN, G.Ya.; SHNEYERSON, A.N.

Monograph on a current problem ("Drug resistance of micro-organisms"  
by M.N.Lebedeva, S.D.Voropaeva. Reviewed by G.IA.Kivman, A.N.  
Shneerson). Antibiotiki 6 no.3:283 Mr '61. (MIRA 14:5)  
(BACTERIA, EFFECT OF DRUGS ON) (LEBEDEVA, M.N.)  
(VOROPAEVA, S.D.)

SHNEYERSON, A.N.; BUYANOVSKAYA, I.S.; ANDREYEVA, N.A.

Preservation of antibiotic resistance in strains of staphylococci  
isolated from patients. Antibiotiki 6 no.6:526-530 Je '61.  
(MIRA 15:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.  
(STAPHYLOCOCCUS) (ANTIBIOTICS)

LEVITOV, M.M.; VERKHOVTSEVA, T.P.; RABINOVICH, M.S.; PREOBRAZHENSKAYA, Ye.V.;  
KULIKOVA, G.N.; BUYANOVSKAYA, I.S.; SHNEYERSON, A.N.

Biosynthesis of new penicillins using propylmercaptoacetic  
acid derivatives as precursors. Antibiotiki 6 no.7:575-581  
JI '61. (MIRA 15:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.  
(PENICILLIN) (ACETIC ACID)



SHNEYERSON, A.N.

Effect of antibiotics from the erythromycin group on some  
biological properties of the diphtherial bacillus. Antibiotiki  
6 no.8:725-731 Ag '61. (MIRA 15:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.  
(ERYTHROMYCIN)  
(CORYNEBACTERIUM DIPHTHERIAE)

LEVITOV, M.M.; INOZEMTSEVA, I.I.; TEBYAKINA, A.Ye.; BUYANOVSKAYA, I.S.;  
SHNEYERSON, A.N.; CHAYKOVSKAYA, S.M.; KOMOKINA, Z.F.; DRUZHININA, Ye.N.

New type of penicillin --  $\alpha$ -phenoxyethylpenicillin and study of  
its microbiological properties. Antibiotiki 7 no.2:104-108 F '62.  
(MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.  
(PENICILLIN)

SEMENOVA, V.A.; IL'INSKAYA, S.A.; TAYG, M.M.; MEL'NIKOVA, A.A.;  
SHNEYERSON, A.N.; BUYANOVSKAYA, I.S.; VESELOV, N.M.

Study of some actinomycetes forming closely related anti-  
biotics. Antibiotiki 8 no.1:12-18 Ja'63. (MIRA 16:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut anti-  
biotikov.  
(ACTINOMYCES) (BACTERIOLOGY--CULTURES AND CULTURE MEDIA)  
(ANTIBIOTICS)

STRUKOV, I.T.; TEBYAKINA, A.Ye.; INOZETSEVA, I.I.; KOSTROMINA, O.Ye.; KAMOKINA, Z.F.; BUYANOVSKAYA, I.S.; SHNEYERSON, A.N.; CHAYKOVSKAYA, S.M.; DRUZHININA, Ye.N.

2,6--dimethoxyphenyl penicillin (methycillin) and its microbiological study. Antibiotiki 8 no.8:690-694 Ag '63. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.

PANINA, M.A.; STRUKOV, I.T.; TEBYAKINA, A.Ye.; BUYANOVSKAYA, I.S.;  
SHNEVERSON, A.N.; CHAYKOVSKAYA, S.M.; DRUZHININA, Ye.N.;  
BRYGINSKAYA, P.S.; VENKINA, T.G.

5-methyl-3-phenyl-4-isoxazole pencillin (oxacillin) and its  
microbiological study. Antibiotiki 8 no. 11:989-994 N '63.  
(MIRA 17:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.

TEBYAKINA, A.Ye.; BUYANOVSKAYA, I.S.; CHAYKOVSKAYA, S.M.; SHNEYERSON, A.N.

Studies on the antibacterial spectrum and determination of the  
biological activity of florimycin (viomycin). Antibiotiki 8 no.10:  
901-905 0 '63. (MIRA 17:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.

STRUKOV, I.T.; VIKHROVA, N.M.; NIKITINA, N.M.; TEBYAKINA, A.Ye.; BUYANOVSKAYA, I.S.; SHNEYERSON, A.N.; CHAYKOVSKAYA, S.M.

Phenoxybenzylpenicillin (phenbenicillin) and its microbiological study. Antibiotiki 9 no.1:3-7 Ja '64.

(MIRA 18:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov, Moskva.

SHNEYERSON, A.N.

Dynamics of the inactivation of semisynthetic penicillins by  
penicillinase-producing staphylococci. Antibiotiki 9 no.4:  
323-328 Ap '64. (MIRA 19:1)

1. Laboratoriya mikrobiologicheskikh metodov issledovaniya  
(zav. A.Ye. Tebyakina) Vsesoyuznogo nauchno-issledovatel'skogo  
instituta antibiotikov, Moskva.



TEBYAKINA, A.Ye.; FABINOVICH, M.S.; ZHDANOVICH, Yu.V.; STRUKOV, I.T.;  
KONDRAT'YEVA, A.P.; BUYANOVSKAYA, I.S.; SHNEFERSON, A.N.;  
GPAGINSKAYA, P.S.; DRUZHININA, Ye.N.

Alpha-aminobenzylpenicillin (ampicillin) and its microbiological  
studies. Antibiotiki 9 no.5:361-392 My '64. (MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov,  
Moskva.

RABINOVICH, M.S.; LEVITOV, M.M.; KULIKOVA, G.N.; BUYANOVSKAYA, I.S.;  
SHNEYERSON, A.N.

New penicillins, derivatives of thioglycolic acid. Antibiotiki  
9 no.5:392-396 My '64. (MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov,  
Moskva.

INOZEMTSEVA, I.I.; STRUKOV, I.T.; KOMOKINA, Z.F.; DZEGILENKO, N.B.;  
SHNEYERSON, A.N.

Semisynthetic penicillins; chlorobutynepenicillin. Antibiotiki  
(MIRA 18:3)  
9 no.8:690-692 Ag '64.

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov,  
Moskva.

100-100000, A.M.; GRAHAM, W. L.

Comparative studies on bactericidal effects of semisynthetic penicillin-resistant penicillins. Antibiotiki 9 no. 8, 505-700 (MIRA 18:3) 1964.

1. Laboratoriya mikrobiologicheskikh metodov issledovaniya  
(zav. A.Ye. Tsybakina; Vsesoyuznogo nauchno-issledovatel'skogo  
instituta antibiotikov, Moskva).